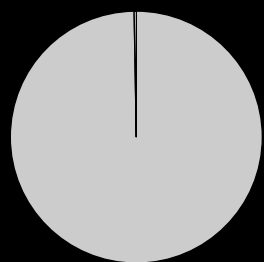
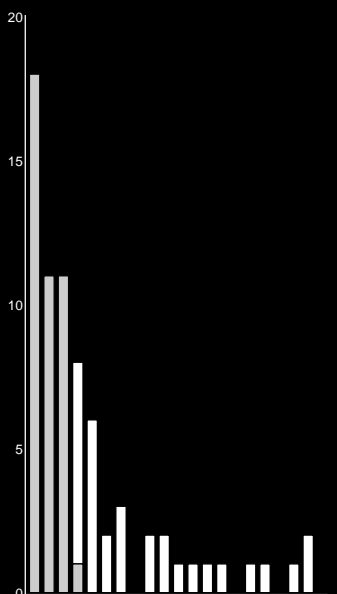


Kansas



Production tonnage 1978-1997

■ U.S. Total
■ Kansas coal production



Number of new permits 1978-1997

■ Interim Program
■ Permanent Program

The first and largest mid-west coal producer

The coal-bearing areas of Kansas cover approximately 18,800 square miles (23 percent of the state's total area). Kansas reserves are estimated to be approximately 0.2 percent of U.S. reserves. Coal beds generally occur in thin seams up to five feet thick.

The first coal mining recorded in Kansas was in 1853 along the Missouri River near Fort Leavenworth. Beginning in 1872, Kansas had some of the country's earliest surface mining. However, the increasingly higher stripping ratio and high sulfur content of the coal have led to sharp declines in Kansas coal production in recent years, and currently there are only two active coal mining operations.

The Kansas regulatory program was approved April 14, 1982; the Abandoned Mine Land Program was approved February 1, 1982, and the emergency Abandoned Mine Land program authority was approved January 10, 1989.

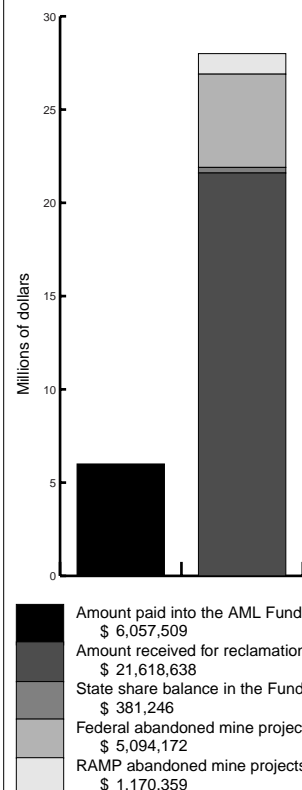
Kansas has the third largest number of emergencies of all coal-producing states and Indian reservations. Since 1977, the state has averaged about 40 emergencies a year, with 1994 being the record year with 84. (In 1994, Kentucky also had a record number of emergencies.) The Office of Surface Mining and the state have spent almost \$5 million abating emergencies in the 20-year period since passage of the Surface Mining Law. Most Kansas emergency projects are unpredictable subsidences, often in densely populated areas.

At a cost of more than \$13 million, the state has completed all priority 1 and a large percent of priority 2 Abandoned Mine Land problems. These were mostly dangerous high wall and subsidence problems. Kansas also has an active Rural Abandoned Mine Land Reclamation Program that has spent over \$1 million to reclaim over 400 acres of problems.

Kansas has an inventory of over \$68 million priority 2 and almost \$26 million priority 3 problems remaining. This includes over \$53 million in dangerous subsidence projects, including \$14 million for stabilization beneath the town of Pittsburg. As a minimum program state, Kansas receives only \$1.5 million annually to complete abandoned mine land reclamation.

coal production¹⁰

| | 1978 | | 1997 | | 1978-1997 Rank |
|---------------------------|---------|--------------------|---------|--------------------|----------------|
| | Amount | Percent U.S. Total | Amount | Percent U.S. Total | |
| | | | | | |
| Tons Produced | | | | | |
| Surface | 907,069 | 0.3% | 268,070 | 0.04% | 22 |
| Underground | 0 | 0% | 0 | 0% | 0 |
| Lignite | 0 | 0% | 0 | 0% | 0 |
| Total | 907,069 | 0.2% | 268,070 | 0.02% | 26 |
| | | | | | |
| Number of Producing Mines | | | | | |
| Surface (bituminous coal) | 12 | 0.3% | 4 | 0.1% | 18 |
| Underground | 0 | 0% | 0 | 0% | 0 |
| Lignite (surface) | 0 | 0% | 0 | 0% | 0 |
| Total | 12 | 0.2% | 4 | 0.09% | 21 |
| | | | | | |
| Mine Production | | | | | |
| Average | 75,589 | 106.3% | 67,017 | 25.4% | |
| >1,000,000 tons | 0 | 0% | 0 | 0% | |
| 300,000-1,000,000 tons | 1 | 0.4% | 0 | 0% | |
| <300,000 tons | 11 | 0.1% | 4 | 0.1% | |



Active mining and reclamation¹⁶

| | 1978 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | Total |
|--------------------------------|------|-------|-----|-------|-------|-----|-------|-----|-------|-----|-------|-------|-------|-------|-----|-------|-----|-----|-----|-------|--------|
| Number of New Permits | | | | | | | | | | | | | | | | | | | | | |
| Surface Mining | 18 | 11 | 11 | 3 | 5 | 1 | 3 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 64 |
| Underground Mining | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 5 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Acreage Permitted | | | | | | | | | | | | | | | | | | | | | |
| Surface Mining | 889 | 1,103 | 844 | 2,434 | 3,039 | 886 | 655 | 0 | 1,053 | 710 | 238 | 105 | 367 | 910 | 0 | 1,528 | 756 | 0 | 135 | 229 | 15,881 |
| Underground Mining | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 787 | 23 | 23 | 0 | 0 | 304 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 135 | 229 | 1,137 |
| Acreage of Bond Release | | | | | | | | | | | | | | | | | | | | | |
| Interim Prog. (final) | 152 | 163 | 271 | 2,775 | 95 | 289 | 0 | 0 | 231 | 76 | 714 | 277 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,043 |
| Phase 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 1,863 | 2,293 | 1,314 | 3,532 | 46 | 0 | 0 | 0 | 0 | 0 | 9,083 |
| Phase 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 0 | 0 | 0 | 137 | 55 | 142 | 0 | 425 | 0 | 570 | 1,329 |
| Phase 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 93 | 0 | 19 | 27 | 17 | 0 | 277 | 155 | 387 | 0 | 542 | 24 | 4,875 | 6,416 |
| Inspections | | | | | | | | | | | | | | | | | | | | | |
| Complete* | NA | NA | 1NA | NA | NA | 806 | 320 | 511 | 253 | 232 | 153 | 154 | 151 | 121 | 121 | 88 | 92 | 87 | 70 | 62 | 3,221 |
| Partial | NA | NA | NA | NA | NA | 750 | 1,178 | 931 | 415 | 341 | 260 | 277 | 279 | 244 | 244 | 176 | 184 | 136 | 137 | 124 | 5,676 |
| Oversight | 0 | 0 | 0 | 0 | 0 | 99 | 67 | 61 | NA | 50 | 22 | 19 | 32 | 28 | 18 | 18 | 12 | 9 | 8 | 7 | 450 |
| Citations Issued | | | | | | | | | | | | | | | | | | | | | |
| NOV's | 1 | 15 | 10 | 13 | 28 | 25 | 63 | 29 | 5 | 12 | 5 | 8 | 7 | 4 | 6 | 8 | 7 | 7 | 1 | 6 | 260 |
| CO's | 0 | 0 | 0 | 0 | 15 | 5 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 7 | 0 | 0 | 9 | 52 |

* Only total inspections available for 1978-1981

Abandoned coal mine reclamation 1977-1997¹⁷

| | Reclaimed Problems | | | Remaining Problems | |
|-------------------------------------------------------------------------------------------------------------|--------------------|-----------------|---------------|--------------------|----------------|
| | OSM Emergency | State Emergency | Non-Emergency | Number | Estimated Cost |
| Priority 1 & 2 (Protection of Public Health, Safety, and General Welfare) and Emergency Projects | | | | | |
| Clogged Streams (miles) | 0 | 0 | 1.6 | 2.2 | \$ 108,887 |
| Clogged Stream Lands (acres) | 0 | 0 | 8.5 | 14.0 | 341,000 |
| Highwalls (feet) | 10.0 | 0 | 102,990.0 | 88,352.0 | 3,483,008 |
| Impoundments (count) | 0 | 0 | 1.0 | 1.0 | 16,000 |
| Piles & Embankments (acres) | 0 | 0 | 233.7 | 243.0 | 8,927,889 |
| Slides (acres) | 0.2 | 0 | 1.0 | 0 | 0 |
| Gases (count) | 0 | 0 | 0 | 2.0 | 5,001 |
| Equipment & Facilities (count) | 0 | 0 | 2.0 | 33.0 | 58,000 |
| Water Bodies (count) | 0 | 0 | 2.0 | 8.0 | 586,400 |
| Industrial Waste (acres) | 0 | 0 | 17.3 | 22.0 | 7,259 |
| Portals (count) | 0 | 0 | 0 | 0 | 0 |
| Polluted Water: Agriculture & Industrial (count) | 0 | 0 | 3.0 | 11.0 | 639,289 |
| Polluted Water: Human Consumption (count) | 0 | 0 | 0 | 2.0 | 262,500 |
| Subsidence (acres) | 31.3 | 11.2 | 16.2 | 1,082.7 | 53,576,950 |
| Surface Burning (acres) | 0.1 | 4.0 | 0 | 0 | 0 |
| Underground Mine Fires (acres) | 0 | 0 | 0 | 0 | 0 |
| Vertical Openings (count) | 12.0 | 279.0 | 26.0 | 300.0 | 638,189 |
| Total | | | | | \$ 68,650,372 |
| Priority 3 (Environmental Restoration) | | | | | |
| Bench (acres) | 0 | 0 | 0 | 0 | \$ 0 |
| Industrial Waste (acres) | 0 | 0 | 0 | 3.0 | 3,001 |
| Equipment & Facilities (count) | 0 | 0 | 1.0 | 65.0 | 224,500 |
| Gob (acres) | 0 | 0 | 94.0 | 205.5 | 1,407,596 |
| Highwall (feet) | 0 | 0 | 5,900.0 | 7,190.0 | 901,500 |
| Haul Road (acres) | 0 | 0 | 0 | 29.0 | 134,170 |
| Mine Opening (count) | 0 | 0 | 0 | 8.0 | 24,000 |
| Pit (acres) | 0 | 0 | 23.4 | 147.4 | 1,428,185 |
| Spoil Area (acres) | 0 | 0 | 321.5 | 4,741.6 | 16,294,158 |
| Slurry (acres) | 0 | 0 | 10.0 | 8.0 | 56,000 |
| Slump (acres) | 0 | 0 | 0 | 344.0 | 5,313,002 |
| Water (gallons/minute) | 0 | 0 | 0 | 51.5 | 175,700 |
| Total | | | | | \$ 25,961,812 |